



PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 630/753/PWO	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/004982	International filing date (day/month/year) 26.11.2004	Priority date (day/month/year) 29.11.2003	
International Patent Classification (IPC) or national classification and IPC G03B21/56, G03B21/58, G03B21/60			
Applicant LASTOLITE LIMITED et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 28.09.2005		Date of completion of this report 07.02.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80288 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Rückerl, R Telephone No. +49 89 2399-6999 	

10/580359
IAP9 Rec'd PCT/PTO 23 MAY 2006**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**International application No.
PCT/GB2004/004982**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-7 as originally filed

Claims, Numbers

1-10 received on 28.09.2005 with letter of 28.09.2005

Drawings, Sheets

1/4-4/4 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☒ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☒ the claims, Nos. 11,12
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
 4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations (Rule 70.7):**see separate sheet**

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Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: GB 679 778 A (HERBERT AUGUSTUS STARKE) 24 September 1952**
- D2: US 5 140 460 A (FUKUHARA ET AL) 18 August 1992**
- D3: US 3 037 424 A (CAPETTA ALBERT) 5 June 1962**
- D4: US 5 361 163 A (MATSUDA ET AL) 1 November 1994**
- D5: US 4 323 301 A (SPECTOR ET AL) 6 April 1982**

- D6: US 5 258 870 A (TAI) 2 November 1993**
- D7: GB 805 216 A (JAYLE ET AL) 3 December 1958**
- D8: JP 2003 066535 A (FUJI KNITTING KK) 5 March 2003**
- D9: US 1 568 023 A (MCMANUS ET AL) 29 December 1925**

The documents **D6-D9** were not cited in the international search report. Copies of the documents are appended hereto.

- 1.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1** does not involve an inventive step in the sense of Article 33(3) PCT.

The document **D5** is regarded as being the closest prior art to the subject-matter of **claim 1**, and discloses (the references in parentheses applying to this document, see figures 1 and 6):

a collapsible projection screen comprising

- i) a projection layer formed of a flexible sheet of fabric (10), and
- ii) a flexible hoop for supporting the projection layer in tension during use (11),
wherein

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- iii) the tensioned projection layer has a front projection surface adapted to have an image projected thereon.

The subject-matter of **claim 1** therefore differs from this known projection screen in that

- i) the flexible sheet of fabric is made of a knitted fabric, and
- ii) a rear surface corresponding to the projection layer is overlaid with a backing layer that absorbs light transmitted through the projection surface of the projection layer.

These two distinguishing features appear to be a juxtaposition of features, combined in a way which does not lead to an unexpected technical effect. Therefore, the question of inventive step is discussed separately for each of the features.

with regard to feature i):

- 1.2 A skilled person is well aware of the generally known alternative materials commonly used for a flexible screen, namely those of plastic films and knitted or woven fabrics, see documents **D1-D9**. The particular choice of one of these three alternatives is done by the skilled person in accordance with circumstances, without having to resort to inventive activity.
- 1.3 In particular, the problem to be solved by the present invention may be regarded as providing a projection screen with good acoustic permeability in order to enable the user to place a loudspeaker behind the screen.
The solution proposed in **claim 1** of the present application cannot be considered as involving an inventive step (Article 33(3) PCT), because the skilled person faced with the above problem would use the teaching of document **D2** or **D6** by exchanging the screen material of **D5** with the knitted fabric disclosed in **D2** (column 2, lines 35-45) and in **D6** (column 1, lines 47-67).
- 1.4 Moreover, the subject-matter of **claim 1** is an obvious combination of **D3**, which discloses a screen material supported by a flexible hoop (see reference sign 17 in column 3, lines 4-8, designating a hoop with adjustable length and width, which

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therefore clearly has to be "flexible"), combined with a screen made of knitted fabric as disclosed in **D2** and **D6** for reasons analogous to those set out in above point 1.3.

with regard to feature ii):

- 1.5 A light absorbing backing layer is obvious, because it is already suggested in documents **D1** (page 3, left column, lines 15-25), **D2** (column 4, lines 3-6), **D3** (column 2, lines 26-34), **D4** (column 2, lines 17-25) and **D6** (column 2, lines 43-44).
2. Dependent **claims 2-10** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see the documents and the corresponding passages cited in the search report.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G03B21/56 G03B21/58 G03B21/60		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 G03B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 679 778 A (HERBERT AUGUSTUS STARKE) 24 September 1952 (1952-09-24)	1-3,5-8
Y	page 2	9-12
X	US 5 140 460 A (FUKUHARA ET AL) 18 August 1992 (1992-08-18)	1,4-7
Y	column 6, line 41 - column 7, line 2; figures 12,13	9-12
X	US 3 037 424 A (CAPETTA ALBERT) 5 June 1962 (1962-06-05)	1-3,5,7, 9,12
Y	columns 1-3; figure 3	10
X	US 5 361 163 A (MATSUDA ET AL) 1 November 1994 (1994-11-01)	1-3,5,6, 11
	column 6, lines 44-65 column 13, line 15 - column 14, line 49	
	-/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *Z* document member of the same patent family		
Date of the actual completion of the international search 16 March 2005		Date of mailing of the international search report 04/04/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer Rückerl, R

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 323 301 A (SPECTOR ET AL) 6 April 1982 (1982-04-06) the whole document -----	9-12

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 679778	A	24-09-1952	NONE	
US 5140460	A	18-08-1992	JP 4298732 A	22-10-1992
			JP 2584125 B2	19-02-1997
			JP 4174829 A	23-06-1992
			JP 2507172 B2	12-06-1996
			JP 4179944 A	26-06-1992
US 3037424	A	05-06-1962	NONE	
US 5361163	A	01-11-1994	JP 3218662 B2	15-10-2001
			JP 5224303 A	03-09-1993
			JP 2884905 B2	19-04-1999
			JP 5297462 A	12-11-1993
			JP 3013503 B2	28-02-2000
			JP 4355745 A	09-12-1992
			JP 2970064 B2	02-11-1999
			JP 4366939 A	18-12-1992
			JP 2737093 B2	08-04-1998
			JP 4338937 A	26-11-1992
			WO 9222009 A1	10-12-1992
			KR 9702673 B1	07-03-1997
US 4323301	A	06-04-1982	NONE	